COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Southwest Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Hutchinson Sealing Systems, Inc.
Wytheville, Wythe County, Virginia
Permit No. SWRO11019

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Hutchinson Sealing Systems, Inc. has applied for a significant modification of its Title V Operating Permit for its rubber mixing, extruding, and molding manufacturing facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact: _____ Date: 10/28/02

Air Permit Manager: _____ Date: 10/28/02

Deputy Regional Director: _____ Date: 10/28/02

FACILITY INFORMATION

Permittee and Facility
Hutchinson Sealing Systems, Inc.
1150 South Third Street
Wytheville, VA 24382

Facility ID No. 51-197-0066

SOURCE DESCRIPTION

Hutchinson Sealing Systems, Inc. manufactures rubber compounds, rubber glass-run channels, and rubber sealing strips for the automotive industry (SIC Codes 3061, 3069 & 2822) at their facility in Wytheville, Virginia. The production of these components involves several processes including rubber mixing, extrusion, flocking, curing, coating, gasket molding, finish work, and assembly. The facility is subject to Title V permitting due to potential emissions of VOC (141.5 T/yr) and Xylene (54.1 T/yr). The facility is currently operating under a minor New Source Review (NSR) permit issued on June 20, 2000, and a Title V operating permit issued on March 12, 2001. The company has submitted an application for a significant modification to their Title V operating permit.

In the rubber molding operations, rubber strip is cut to length and molded together in electric hydraulic presses to produce gasket assemblies. Flock may be applied to gasket corners, as needed. Gaskets requiring flock are placed in a corner flock adhesive application booth where flock adhesive is manually brushed onto the gasket corner. The gaskets are then transferred to an automatic corner flocking booth where flock is applied to the adhesive area of the gasket. The corner flock adhesive application booths and the automatic corner flocking booths were previously vented inside the building. The corner flock adhesive application booths and the automatic corner flocking booths are now vented outside the building through stacks in the roof. These additional stacks are the basis for this significant modification to the Title V permit. Coincidental with preparation of gasket assemblies, glass panels are prepared using robotic machines that apply primer to a specific area of the glass surface. The glass panels are transferred to the glass/gasket molding presses that mold the gaskets to the glass panels.

In the rubber mixing process, rubber, carbon black, chemical additives, and process oils are charged into batch mixers. After mixing, the batch is dropped into a chute and fed into a drop/strip mill where the rubber is sheeted into strips 3 ¼" wide and ½" thick. The strip passes through anti-tack solution to prevent sticking and draped over festoon bars for cooling and drying. The rubber strip is stacked for storage, shipment, or eventual use in the extrusion lines.

Rubber extrusion begins with rubber strip being continuously fed into extruder heads. Coincidental with the rubber feed, coil steel or woven wire with polyester support is roll-formed into engineered shapes and extruded onto the rubber strip. The extruded rubber strip continues to adhesive application and then to electrostatic polyester flocking. After flock is added, the strip is cured in electric curing ovens. Electrostatic precipitators control particulate matter and oil mist in the curing oven exhaust. After the strip exits the curing ovens, it is cooled and passed through primer and topcoat spray booths for application of a low friction coating (Lines 1 and 3 only). The strip is cut to length, finished, and shipped, or transferred to other operations.

COMPLIANCE STATUS

The facility is inspected at least once each year. The facility indicated that it is in compliance with all applicable requirements in their Title V application. The most recent inspection performed May 17, 2002, indicated that no problems were observed at the facility.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Extrusion Line 1							
E Line 1	2, 4, 6, 7, 8	Extruders, drip & wipe adhesive app., elec. flocker, elec. curing ovens, cooling, forming, primer & topcoat app., marking, and finishing.	7,500 T/yr EPDM rubber processing (total for E Lines 1-3)	Electrostatic Precipitator – Smog Hog Model APC-12-4, Paint Filters, Flock Recirculating System	1, 3, 4, 5	Particulate (inc. oil mist)	June 2, 2000
Extrusion Line 2							
E Line 2	2, 4, 6	Extruders, drip & wipe adhesive app., elec. flocker, elec. curing ovens, cooling, forming, marking, and finishing. No spray booths in E Line 2.	7,500 T/yr EPDM rubber processing (total for E Lines 1-3)	Electrostatic Precipitator – Smog Hog Model APC-12-4, Flock Recirculating System	1	Particulate (inc. oil mist)	June 2, 2000
Extrusion Line 3							
E Line 3	11, 6, 8, 9, 10	Extruders, drip & wipe adhesive app., elec. flocker, elec. curing ovens, cooling, forming, primer & topcoat app., marking, and finishing.	7,500 T/yr EPDM rubber processing (total for E Lines 1-3)	Electrostatic Precipitator – Smog Hog Model APC-12-4, Paint Filters, Flock Recirculating System	1, 3, 4, 6	Particulate (inc. oil mist)	June 2, 2000
Rubber-To-Glass Line							
RG Line 4	20 - 24	Molding presses, corner flocking machines, and primer application robots.	- -	Diversified Air Systems canister filter	22-1, and 24-1	Particulate	June 2, 2000
Rubber Mixing Line 5							
RM Line 5	- -	Mixer, drop & strip mills, slab dip, cooling, drying, batch-off machines, and finishing.	25,000 T/yr EPDM rubber production (total for both RM Lines)	Internal Exhaust Dust Collector Cartridge Filters, 36,000 cfm	DC1	Particulate	June 2, 2000
Rubber Mixing Line 6							
RM Line 6	- -	Mixer, drop & strip mills, slab dip, cooling, drying, batch-off machines, and finishing.	25,000 T/yr EPDM rubber production (total for both RM Lines)	Internal Exhaust Dust Collector Cartridge Filters, 36,000 cfm	DC2	Particulate	June 2, 2000

EMISSIONS INVENTORY

A copy of the 2001 annual emissions update is attached as Attachment A. Emissions are taken from this information and summarized in the following tables.

2001 Actual Emissions

	Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO_2	PM_{10}	NO_x
Extrusion Lines	12.09	- -	- -	0.0065	- -
Rubber To Glass Lines	16.09	- -	- -	0	- -
Rubber Mixing Lines	0.38	- -	- -	0.024	- -
Total	28.56	- -	- -	0.03	- -

EMISSION UNIT APPLICABLE REQUIREMENTS INVOLVING SIGNIFICANT MODIFICATION – RUBBER-TO-GLASS LINE

Limitations

The permittee has applied for the addition of four new stacks on the Rubber-To-Glass Line (molding) to exhaust emissions from previously permitted equipment to the building exterior. Emissions from each of the following pieces of equipment will be exhausted through its own stack:

- Corner flock adhesive application booth at the front door assembly area;
- Automatic corner flocking booth at the front door assembly area;
- Corner flock adhesive application booth at the rear door assembly area; and
- Automatic corner flocking booth at the rear door assembly area.

The following Virginia Administrative Code that has specific emission requirements has been determined to be applicable to each of the four additional exhaust stacks:

9 VAC 5-50-80, Standard for Visible Emissions – Limits visible emissions to no more than 20% opacity except for one six-minute period not to exceed 30% opacity.

Monitoring and Recordkeeping

The permittee shall conduct weekly opacity observations on each corner flock adhesive application booth exhaust and each automatic corner flocking booth exhaust to ensure compliance with opacity limits.

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include monthly hours of process operation, monthly and yearly material throughputs and the results of all opacity observations.

Testing

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permit contains general reporting conditions that include semi-annual monitoring reports, annual compliance certification reports, and notification of deviations or excess emissions.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable by the applicant:

None identified.

FUTURE APPLICABLE REQUIREMENTS

No future applicable requirements are known.

INAPPLICABLE REQUIREMENTS

According to 9 VAC 5-50-10.D, the provisions of 9 VAC 5 Chapter 40, unless specified otherwise, shall apply to new and modified sources to the extent that those provisions are more restrictive than the provisions of 9 VAC 5 Chapter 50, 9 VAC 5 Chapter 80, or any permit issued pursuant to 9 VAC 5 Chapter 80. There are no current permit conditions limiting emissions from the proposed units and there are no emissions standards in 9 VAC 5 Chapter 50, other than opacity, that apply to the proposed units. Therefore, 9 VAC 5 Chapter 40 was reviewed for applicable emissions standards. The only emissions standards that could apply to the proposed emissions units are 9 VAC 5 Chapter 4, Part II, Article 4, Emissions Standards for General Process Operations. A review of 9 VAC 5 Chapter 4, Part II, Article 4, indicates the standard does not apply to the automatic corner flocking booths or the corner flock adhesive application booths. As indicated below, the automatic corner flocking booths and the corner flock adhesive application booths are exempt from 9 VAC 5 Chapter 4, Part II, Article 4, Emissions Standards for General Process Operations.

9 VAC 5-40-240.C.1, indicates process operations with a process weight rate capacity of less than 100 pounds per hour are exempt from the provisions of 9 VAC 5 Chapter 4, Part II, Article 4. According to the permittee, the automatic corner flocking booth at the front door assembly area processes a maximum of 3600 parts per day using 0.003 pound of flock per part. The process weight rate is then calculated as follows:

(3600 parts/day)(0.003 lb/part)(1 day/24 hours) = 0.45 lb/hr.

According to the permittee, the automatic corner flocking booth at the rear door assembly area processes a maximum of 3200 parts per day using 0.002 pound of flock per part. The process weight rate is then calculated as follows:

(3200 parts/day)(0.002 lb/part)(1 day/24 hours) = 0.27 lb/hr.

The total process weight rate for the automatic corner flocking booths is calculated as follows:

(0.45 lb/hr + 0.27 lb/hr) = 0.72 lb/hr.

The automatic corner flocking booths, having a process weight rate of less than 100 pounds per hour, are exempt from the provisions of 9 VAC 5 Chapter 4, Part II, Article 4.

According to the applicant, the maximum amount of adhesive used in the corner flock adhesive application booths is 0.17 gallons per hour. The density of the adhesive is 8.29 pounds per gallon. The process weight rate is then calculated as follows:

(8.29 lb/gal)(0.17 gal/hr) = 1.41 lb/hr.

The corner flock adhesive application booths, having a process weight rate of less than 100

pounds per hour, are exempt from the provisions of 9 VAC 5 Chapter 4, Part II, Article 4.

40 CFR Part 64, Compliance Assurance Monitoring, does not apply to the automatic corner flocking booths or the corner flock adhesive application booths. Potential emissions from these units without consideration of control devices are below those required for an emissions unit to be classified as major.

COMPLIANCE PLAN

Not applicable.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation[1] (9 VAC_)	Pollutant Emitted (9 VAC 5-80-720 B.)	Rated Capacity (9 VAC 5-80-720 C.)
- -	Cleaver Brooks natural gas fired boiler	9 VAC 5-80-720 C	PM, SO_2, NOx, CO, VOC	4.185 MMBtu/hr
- -	Onan propane fired emergency generator	9 VAC 5-80-720 C	PM, NOx, CO, VOC	12.5 kW
- -	Chemlok 459X (storage, mixing, dispensing)	9 VAC 5-80-720 A & B	VOC	- -
- -	Post cure/sample oven	9 VAC 5-80-720 B	PM, SO_2, NOx, CO, VOC	400,000 Btu/hr
TR-1	process oil storage tank	9 VAC 5-80-720 B	VOC	8,000 gallons
TR-2	process oil storage tank	9 VAC 5-80-720 B	VOC	8,000 gallons
- -	Topcoat mix room	9 VAC 5-80-720 B	VOC	- -

[1]The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit was placed in the Wytheville Enterprise newspaper in Wytheville, Virginia on September 12, 2002. The EPA was sent a copy of the draft permit and notified of the public notice by electronic mail on September 6, 2002. The affected states, which include West Virginia, Tennessee and North Carolina, were sent a copy of the public notice by regular mail on September 6, 2002. All persons on the Title V mailing list were sent a copy of the public notice by electronic mail, facsimile or regular mail no later than September 16, 2002.

The 30-day public notice period and the 45-day proposed permit review period ran concurrent. Public comments were accepted from September 12, 2002, through October 11, 2002. No comments were received from the public or the affected states. The EPA was notified by electronic mail on October 11 that the 30-day public notice period ended at the close of business on that day with no comments having been received. The 45-day proposed permit review period ended October 26, 2002, with no comments received from the EPA regarding the proposed permit.

Attachment A

2001 Emission Statement